433 and repair shops for motor vehicles, factories have arisen here in which dredges, drilling machines, and other mining needs are produced. There are even factories for the production of glass, crockery, and electric lamps (Pravda November 12, 1947); these factories, according to various announcements, even exceed their annual quota. For these reasons the growth of the city to more than 50,000 inhabitants (1950) is understandable. But, on the other hand, large plants also appear here; mostly they are oriented toward raw materials, and their founding for the most part goes back to the second Five Year Plan. These plants are responsible for supplying extraordinarily large areas, indeed in part for the entire Far Eastern region. This results naturally not only in a burdening of the transportation system but also to inconveniences in regular supplies.

396 Shipbuilding has been fostered with the greatest of energy in the last few years. If Vladivostok with its dockyards for military and commercial ships was the leader in the past, it is at present surpassed by Komsomol'sk in this connection. Nothing has been announced about the capacity of the dockyard installations, but the estimate of the costs for building dockyard installations under the second Five Year Plan give a certain idea of the size of these installations. These costs were six times as large as the sums that were laid out for building the Marty ship dockyard in Nikolayev on the coast of the Black Sea in the Ukraine. This yard was built at approximately the same time and has six docks. The first sea-going ship left Komsomol'sk in 1939. Since then the dockyard installations here have been further expanded. According to their supplying plant, "Amur Steel," whose costs were somewhat higher, the Komsomol'sk dockyards are absolutely the largest plant which has been built in the Far East. The known shipyards in Vladivostok, in Nakhodka in the same area, and also in Nikolayevsk at the mouth of the Amur and in Khabarovsk /178/ have been further expanded. New shipyards have come into being in Sovyetskaya Gavan', in Petropavlovsk on the Kamchakta Peninsula, in Aleskandrovsk on Sakhalin, and in Magadan, which has already been mentioned. In the last two places named, however, there were not new constructions; only repairs were made. Warships were built in Vladivostok, Komsomol'sk, Khabarovsk, and Nikolayevsk. Sovyetskaya Gavan' is supposed to have been expanded recently as a base for smaller man-of-wars. Dockyards in the various river areas are available for building river vessels. Ulan-Ude takes care of the Selenga shipping. In the Amur area there are three dockyards: Kokuy near Sretensk on the Shilka, the left source

river of the Amur; Blagoveshchensk with the important Lenin Dockyard at the mouth of the Zeya; and Khabarovsk at the beginning of the lower course of the Amur. 396

In the machine industry the construction of transportation machinery in especially large plant installations is in the foreground. The railroad workshops of Ulan-Ude, Chita, Khabarovsk, and Ruzhina near Vladivostok serve to supply and maintain the railroads; all of these workshops are large installations. The most important of these is the plant for the construction of locomotives and railroad cars in Ulan-Ude. It constitutes an entire section of the city, which, according to a Soviet report, has three times as many inhabitants as all of Ulan-Ude (Verkhne Udinsk) before World War I. Since at that time the city had approximately 15,000 inhabitants, approximately 45,000 persons must be connected with this plant in some fashion. This also corresponds to the importance of the plant which is competent to supply the railroads not only of the Far East but also of all east Siberia. According to the plant's projected capacity, it is supposed to be in a position to deliver 2,000 passenger cars and up to 12,000 freight cars a year in addition to an undetermined number of locomotives. The other large railroad workshops mentioned above are in a position to repair locomotives and to overhaul them completely and also to a limited extent to build railroad cars. The base for motor vehicle production lies in Khabarovsk, which in the "Kaganovich Plant" has the largest installation of this type in the Far East. Airplane factories exist in Khabarovsk and Vladivostok. In contrast to the industry for transport machinery, the construction of agricultural machinery is distributed among a large number of places. Only Khabarovsk has a large plant. 397 398 399 407

In the building materials industry, with progressive industrialization, the need for modern building materials grew so much that a bottleneck has arisen here. Numerous small brick works and lime kilns must first be created, which are scattered over the vast areas and which in each case satisfy the local needs. A mechanized large brick-works was brought to life in the city itself for the building up of Komsomol'sk. The need for cement which is especially great had to be covered for the most part by other regions in the Soviet Union /179/ up to the beginning of World War II. 339

Up to 1937 there were in the Far East only two cement factories, which were in Spassk north of Vladivostok. Production here in the same year was 164,000 tons. By 1942 this production had already reached 525,000 tons. In this output the production of the cement

361 this city almost 25 percent of the total population of the Buryat-Mongol [397] ASSR have been brought together. Ulan-Ude has the largest locomotive and railroad car factory in eastern Siberia; this factory supplies the whole Far East. Supported by the Buryat's important breeding of livestock, [253] the largest meat factory in Siberia, which produces canned meats, frozen meats, and other preserved meat goods has come into existence. The meat plant is in a position to process 400 cattle, 1,000 sheep, and 250 pigs a day. In 1940, 25 million cans of meat were sent out. Two large [323] glass factories make Ulan-Ude also the supply center for crockery and glass goods for the entire Soviet Far East. Lying on a river and a railroad, Ulan-Ude is favorably located in terms of transportation. At the [376] same time Ulan-Ude is also the center of the Selenga water transportation, for which river steamers and barks are built in the city's own dockyard. Steamers not only carry traffic downstream but also carry it up the tributaries, for example on the Chikoy, which runs through agricultural regions. Of no less great importance is the floating of lumber, since the tributaries of the Selenga come from areas rich in forests. Here [313] again the lumber streams into Ulan-Ude, where it is processed in large sawmills. Iliynsk, which lies on the Selenga 57 kilometers below the capital, is also an important wood-processing center.

133 Ulan-Ude lies at the point where the Selenga Valley unites with the valley of the Uda. As a contiguous graben depression, the two form a morphological-tectonic unit, and in their natural state, they were once a steppe. /215/ /Sketch Map of the Buryat-Mongol ASSR:/2/216/ These two valleys today are the most heavily populated and economically the most important regions in the Buryat-Mongol ASSR.

Above Ulan-Ude the valley of the Selenga soon expands into a hilly to gently rolling, pure steppe landscape, which continues over 487 the border into Mongolia. It is traversed by the old caravan road, which connects Ulan-Ude with the capital of the Mongolian People's Republic, Ulan-Bator, the former Urga. At the border crossing Kyakhta (approximately 10,000 inhabitants) lies opposite the Mongolian Atlan Bulak 491 (Chinese: Maimachen). This overland route, expanded into an auto- 496 mobile highway in the period of the Soviet Union, has since 1938 been supplemented by a railroad line, which branches from the main line at Ulan-Ude but does not follow the old road. Rather it goes around Gusinoye Lake in a western arc and reaches the border at Naushki, approximately 20 kilometers west of Kyakhta. A lengthening of this 491 railroad to Urga was carried out in 1949. A land route usable throughout the year by trucks branches off from Novo Selenginsk toward the west into the river area of the upper Dzhida.

361 563 lie at a distance from the Amur are as good as uninhabited and in many cases are also unknown. Besides the Goldi and Gilyak, who, being fishing peoples, live in fixed dwellings primarily on the Amur and its tributaries, there are reindeer-breeding Samaghir who traverse the region of the Gorin, and the Negidal of the Amgun region, who are smaller in number. The Olcha are diffused on the right side of [135] the Amur. Findings of gold, which have been made on almost all the left tributaries of the lower course of the Amur, have given some spurs to settlement in very recent times. The rivers on which gold has been found are the Limuri, Pilda, Bichi, and it has also been found in Orel Lake as well as on the lower course of the Amgun.

361 The most important localities on the lower course of the Amur are Komsomol'sk and Nikolayevsk. Komsomol'sk lies alone in a vast, unoccupied region of the left bank of the Amur. The city arose only after 1926 from the small fishing village of Perskoye; it was the creation of the Communist youth (Komsomol), from which it has re- [161] ceived its name. By 1939 it already numbered 70,000 inhabitants, and today its population is estimated to be more than 150,000. The •[34] city has a large river harbor with an important shipyard in which sea- [329] going ships are also built. The largest undertaking is the steel and rolling mill, "Amur Steel," which is supposed to have been expanded to an annual capacity of 500,000 tons of crude iron through the con- [382] struction of three blast furnaces. The already existing oil refinery has been enlarged by the addition of a cracking installation. A second [377] heat power plant is under construction, and a large water power plant was completed some time ago to supply the city with electricity. In addition, the city houses around twenty additional industrial undertakings and promises to become the economic center of the entire 361 area around the lower Amur. Already several years ago the city was 496 connected with the Amur Railroad west of Khabarovsk by a railroad line, which begins in Volochayevka. In order to counteract the difficulties of building a railroad in the damp Amur plain, the railroad was laid on the western edge of the plain and also goes around Lake Bolon' in the west. With this course, new dry areas were opened up to agriculture, and at the same time the rich supplies of wood in the forests /259/ have been brought closer to exploitation. Of greatest significance, however, is the fact that Komsomol'sk is the end of the BAM. By using this railroad the vast areas of the northern Amur country have in Komsomol'sk their nearest exit to the sea. However, the natural unfavorability of the mouth of the Amur has led to a

133 361 Of the more favorable bays on the northern part of the Sikhote-Alin' coast, only the bay is still to be mentioned on which the already-mentioned harbor of Sovyetskaya Gavan' lies. The natural bay, which is suitable as a landing place, has a vast, flat hinterland, which also has a rather thick agrarian population. Since the completion of the railroad constructed from Komsomol'sk to here, the locality has developed quickly into a city with more than 20,000 inhabitants. It has also received a modern harbor. The processing of wood stands at the center of the economy, but, in addition, ship construction is also pursued. The harbor has a floating dock for ships with up to 5,000 gross registered tons.

[504] [346]

361 For the rest there are in addition numerous small Russian fishing localities on the coast. These mostly lie at the mouths of rivers, and now, through the bringing together and the building up of the fishing industry, these localities are also experiencing a certain upsurge. The supplying of the localities is done by coastal steamer. Only where wider bays and more extensive valley areas have given the opportunity, have Russian settlers also made their appearance here. These settlers have in places already penetrated 50 kilometers and more into the land.

[505]

133 361 The real, vast mountain massif of the Sikhote-Alin' is very sparsely populated; indeed, large sections are uninhabited. In the pathless interior on the upper course of the Bikin and of the Khor, on the Mukhen, Anyu, and upper Khungari, the Tungus Orochi and Olcha are still to be encountered. They wander as nomads with their pointed tents and live exclusively from hunting and fishing. But their number becomes ever smaller. Otherwise only a few Russians and Chinese traverse the wilderness of the lonely valleys and mountains while hunting for fur-bearing animals and the antlers of Istubr stag. The opportunities for agriculture and the breeding of livestock are slight. Only the broad bottom valleys of the main rivers are suitable for this; here, from the valley of the Ussuri on, Russian settlers are in the process of a slow penetration into the interior, especially on the Khor, Bikin, and Iman, in whose valleys /265/ they can already be found far in among the mountains. It cannot be said how much the collectivization of agriculture has contributed here to a further opening-up of the land or whether a perseverence on the land already won is the consequence of these measure.

137 Greater prospects for human activity are offered by the natural resources. Despite the careless cutting down of trees in the border

361 The city of Vladivostok itself is very narrow in the overall installation. It encloses the "Golden Horn" and also stretches along Amur Bay. A section of the city also lies on the northern end of Russkiy Island opposite the entrance into the "Golden Horn." The hills rising quickly from the coast give an almost southern appearance to the view of the city with its rows of houses rising on the slopes. The main streets as a rule run parallel to the coast. The secondary streets are often so steep that they can be traveled only with difficulty. In contrast to the narrowness of the city and the tasteless apartment houses and business houses crowding the city, the varied, green surroundings, which are decorated by numerous, beautifully situated summer houses, appear especially pleasant. Russians constitute the [167] overwhelming majority of the population, but the percentage of Chinese and Koreans is very significant. In 1926 there were 23,400 Chinese, 7,000 Koreans, and 600 Japanese in a total population of 107,000. The Chinese as a rule are unmarried and work by preference as harbor workers.

361 Vladivostok is not only a harbor city, but it also has developed [255] into an industrial city. In first place here is the fish industry, which, however, is not concentrated solely in the city but rather is distributed over many localities in the immediate and more distant environs of the city. The fish industry is occupied predominantly with the canning of fish and crabs. Numerous fishing collection points along the entire southern coast supply the material. The most important localities lie on bays or on islands. The most important places are Nakhodka, where a railroad line from Suchan ends, Sarubino, and the islands of Popova, Reineke, and Putyatin. In second place is the wood industry, [322] which processes valuable deciduous trees and supplied wood products such as matches, veneer sheets, and furniture. In addition, the city also has flour and rice mills, leather factories and soap boilers. [396] Vladivostok has great importance as a naval harbor and a shipyard, [399] especially for naval ships. There is in addition a plant for constructing airplanes. An oil refinery supplements the entire industrial and [382] transportation economy. Among the numerous scientific institutions in Vladivostok, the branch office of the Academy of Sciences is [815] especially prominent. It has an important share in the exploration of the Far East.

361 Apart from this fish industry, which is distributed among 322 numerous localities along the coast, the area around Vladivostok is also rather richly equipped with other industrial installations. Among